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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,569	01/15/2002	Angela Rief	SI01-031	4683
21495	7590	12/16/2003	EXAMINER	
CORNING CABLE SYSTEMS LLC			NASRI, JAVAID H	
P O BOX 489			ART UNIT	
HICKORY, NC 28603			PAPER NUMBER	

2839

DATE MAILED: 12/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/047,569

Applicant(s)

RIEF ET AL.

Examiner

Javaid Nasri

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 and 9-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-14, 16 and 17 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. The indicated allowability of claims is withdrawn in view of the newly discovered reference(s). Rejections based on the newly cited reference(s) follow.

### ***Specification***

2. The disclosure is objected to because of the following informalities:
  - a) On page 14, line 7, figures 6a and 6b are mentioned, but inner sleeve 8' and outer sleeve 8'' are shown in figure 7a and 7b.
  - b) On page 14, line 12, change "12" to -- 8' --.

**It should be understood that these are few examples only. Applicant is requested to check the entire disclosure and correct the disclosure appropriately.**

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 9-14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schumacher et al (4,264,127, cited in previous office action) in view of Hirabayashi et al (6,595,697).

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Schumacher et al discloses an optical fiber (52, 54) and a sleeve (32), the sleeve is arranged on an end portion of the optical fiber (see figure 5), and terminates flush with the associated extreme end of the optical fiber, so that on the one extreme end there is formed a continuous coupling face, with which the optical fiber coupling unit can be placed onto an optical waveguide component to establish an optical coupling, the optical fiber being closely surrounded by the sleeve with a distance between the optical fiber and the inner wall of the sleeve of 1-5  $\mu\text{m}$  (looking at figures it is inherent that the distance is between 1-5  $\mu\text{m}$ ), adhesive (62), the coupling face extends approximately at an angle of 82 degrees with respect to the longitudinal axis of the optical fiber (see figure 5, col. 3), sheath and exposed fiber, slit (50), the optical fiber and its sheath being arranged in the slit space (see figures 4 and 5), inner sleeve (36) outer sleeve (42), (see figure 1), polishing (see col. 5, lines 61-68),

However, Schumacher et al does not disclose:

- a) a planar surface adjacent to its circumferential surface extending to the continuous coupling face. Hirabayashi et al discloses a planar surface adjacent to its circumferential surface extending to the continuous coupling face (see marked figure 3A, attached), therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to modify Schumacher et al so that to have a planar surface adjacent to its circumferential surface extending to the continuous coupling face in view of Hirabayashi et al for polarization.

5. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art figures 1 and 2 in view of Hirabayashi et al

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The admitted prior art figures 1 and 2 discloses an optical waveguide component, in particular an optical chip, the optical waveguide component having a placement face, from which an optical structure extends, and an optical fiber coupling unit, having an optical fiber attached thereto, which is placed with its coupling face against the placement face of the optical waveguide component, thereby establishing an optical coupling between the optical fiber and the optical structure and is fastened on the placement face.

However, the admitted prior art figures 1 and 2 does not disclose:

- a) a planar surface adjacent to its circumferential surface extending to the continues coupling face. Hirabayashi et al discloses a planar surface adjacent to its circumferential surface extending to the continues coupling face (see marked figure 3A, attached), therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to modify the admitted prior art figures 1 and 2 so that to have a planar surface adjacent to its circumferential surface extending to the continues coupling face in view of Hirabayashi et al for polarization.

6. Claims 1, 2, 4, 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng 6,540,411, cited in previous office action) in view of Hirabayashi et al.

Cheng discloses an optical fiber (30) and a sleeve (25), the sleeve is arranged on an end portion of the optical fiber (see figure 4), and terminates flush with the associated extreme end of the optical fiber, so that on the one extreme end there is formed a continuous coupling face, with which the optical fiber coupling unit can be placed onto an optical waveguide component to establish an optical coupling, the optical fiber being closely surrounded by the sleeve with a

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distance between the optical fiber and the inner wall of the sleeve of 1-5  $\mu\text{m}$  (looking at figures it is inherent that the distance is between 1-5  $\mu\text{m}$ ), the coupling face extends **approximately** at an angle of 82 degrees with respect to the longitudinal axis of the optical fiber (see figures), sheath and exposed fiber, slit (50), the optical fiber and its sheath being arranged in the slit space (see figures 4 and 5), inner sleeve (36) outer sleeve (42), (see figure 1), polishing (see col. 5, lines 61-68),

However, Cheng does not disclose:

- a) a planar surface adjacent to its circumferential surface extending to the continues coupling face. Hirabayashi et al discloses a planar surface adjacent to its circumferential surface extending to the continues coupling face (see marked figure 3A, attached), therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to modify Cheng so that to have a planar surface adjacent to its circumferential surface extending to the continues coupling face in view of Hirabayashi et al for polarization.

7. Claims 1, 2, 5, 6, 9-11, 13, 14 and 17 rejected under 35 U.S.C. 103(a) as being unpatentable over Manning (4,743,084, cited in previous office action) in view of Hirabayashi et al.

Manning discloses an optical fiber (22) and a sleeve (2), the sleeve is arranged on an end portion of the optical fiber (see figure 3), and terminates flush with the associated extreme end of the optical fiber, so that on the one extreme end there is formed a continuous coupling face, with which the optical fiber coupling unit can be placed onto an optical waveguide component to

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establish an optical coupling, the optical fiber being closely surrounded by the sleeve with a distance between the optical fiber and the inner wall of the sleeve of 1-5  $\mu\text{m}$  (looking at figures it is inherent that the distance is between 1-5  $\mu\text{m}$ ), the sleeve is made of material (ceramic) which has coefficient of thermal expansion corresponding approximate to that of the optical fiber, sheath (23) and exposed fiber (22), inner sleeve (2) outer sleeve (7), (see figure 3), polishing (see col. 4, lines 63-68), the inner and outer sleeves are secured by adhesive (see col. 4, lines 6-10),

However, Manning does not disclose:

- a) a planar surface adjacent to its circumferential surface extending to the continues coupling face. Hirabayashi et al discloses a planar surface adjacent to its circumferential surface extending to the continues coupling face (see marked figure 3A, attached), therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to modify Manning so that to have a planar surface adjacent to its circumferential surface extending to the continues coupling face in view of Hirabayashi et al for polarization.

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schumacher et al or Cheng or Manning in view of Hirabayashi et al.

Schumacher et al or Cheng or Manning in view of Hirabayashi et al discloses all the limitations of claim 1, as shown above,

However, Schumacher et al or Cheng or Manning does not disclose,

- a) the sleeve having an outside diameter between 2-10 mm. It would have been an obvious matter of design choice to make the sleeve of Schumacher et al or Cheng or Manning to have an outside diameter between 2-10 mm, since such a modification would have involved a mere change in the size or shape of a component. A change in size or shape is generally recognized as being within the level of ordinary skill in the art.

***In re Rose*, 105 USPQ 237 (CCPA 1955).**

- b) the sleeve having a length of at least 2 mm. It would have been an obvious matter of design choice to make the sleeve of Schumacher et al or Cheng or Manning to have a length of at least 2 mm, since such a modification would have involved a mere change in the size or shape of a component. A change in size or shape is generally recognized as being within the level of ordinary skill in the art. ***In re Rose*, 105 USPQ 237 (CCPA 1955).**

**Note: In the specification, the applicant have not specified any specific reason for the size.**



***Allowable Subject Matter***

10. Claim 15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

**REASONS FOR ALLOWANCE**

11. The following is an examiner's statement of reasons for allowance:

The reason for allowance of the claims is the inclusion of the limitation,

- a) for claim 15, the inner sleeve having the same outside diameter as the sheathing, in combination with other limitations in the claim which is not found in the prior art reference of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Arguments***

12. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

**Contact**

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javaid Nasri whose telephone number is 703 308 5876. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on 703 308 2710. The fax phone number for the organization where this application or proceeding is assigned is 703 872 9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.

**Any correspondence to this action may be mailed to:**

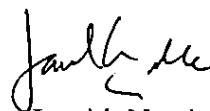
**Commissioner for Patents  
Post Office Box 1450  
Alexandria, VA 22313-1450**

For additional information regarding this new address, which was effective May 1, 2003, see *Correspondence with the United States Patent and Trademark Office*, 68 Fed. Reg. 14332 (March 25, 2003).

**Or faxed to:** 703-308-7722 or 308-7724 (informal or draft communications should be clearly labeled "PROPOSED" or "DRAFT")

**Hand-delivered responses should be brought to:**

**Crystal Plaza 4, Fourth Floor (receptionist)  
2201 South Clark Place, Arlington, Virginia**

  
Javaid Nasri

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Primary Examiner

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JN  
jhn

December 4, 2003